

### Office Action Summary

**Application No.**

10/567,730

**Applicant(s)**

ITO, KAORI

**Examiner**

AMJAD ABRAHAM

**Art Unit**

4151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-12 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date herewith.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, drawn to a method for manufacturing a card using a transfer sheet.

Group II, claim(s) 7-12, drawn to an apparatus used to manufacture a card.

2. The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the common technical feature in all groups is the addition of an ink receiving layer to a resin molded product. The element cannot be a special technical feature under PCT Rule 13.2 because the element is shown in the prior art. Japanese Patent Publication (JP 11028556 A) discloses the addition of a transfer sheet to impart an ink receiving layer on an injection molded product. The reference specifically suggests the addition of an ink receiving layer to a molded product during an injection molding process.

3. During a telephone conversation with Kent Tobin on October 2, 2008 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-12 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

**Action on the merits follows below**

***Information Disclosure Statement***

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. **The applicant has cited Unexamined Japanese Patent Application KOKAI Publication No. H11-28856 on page 2 of the specification. An IDS has not been filed by the applicant listing the reference.**

***Drawings***

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation in claim 1 ("where a surface of said ink receiving layer (2) faces a mold gate (6) of said metal mold (5)') must be shown or the feature(s) canceled from the claim(s). **Figure 1 needs correction because it shows the mold gate on the same side of the mold as the ink receiving layer. Figure 1 does not show a mold gate facing the ink receiving layer.** No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, and 4-5 are rejected under 35 U.S.C. 102(b) as anticipated by Yamaoka (Japanese Patent Publication JP 411028856 A) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamaoka (Japanese Patent Publication JP 11028856) in view of Aoki et al. (Japanese Patent Publication JP 02001239779 A).
8. In claim 1 Yamaoka teaches a method for manufacturing a card comprising **(See paragraphs [0001-0003], disclosing a decorating method used to impart a design print layer onto a resin molded article):** a step of inserting a transfer sheet **(See**

**drawing 1 and paragraph [0003] disclosing a part number (1) which is a transfer sheet which includes both an ink receiving layer and a base material layer.)**

constituted by a base material sheet **(See drawing 1 and paragraph [0003] disclosing part number (2) which is a substrate and acts as the base material sheet)** on which an ink receiving layer **(See drawing 1 and paragraph [0003] disclosing part number (4) which is a design print layer which acts as an ink receiving layer.)** is formed into a cavity of a metal mold **(See paragraph [0017] disclosing that the product is formed in a metallic mold by injection molding.)** in a state where a surface of said ink receiving layer faces a mold gate of said metal mold **(See drawing 5 showing the transfer sheet and ink receiving later facing the mold gate.)**; a step of molding a card base by injecting an injection-molding resin into said cavity in a state where said transfer sheet is disposed in said cavity **(See paragraphs [0001-0003] disclosing the injection molding of a resin material onto the transfer sheet in order to impart the ink receiveing layer onto the resin molded product.)**, and at the same time joining said ink receiving layer to said card base **(See paragraph [0003])**; a step of taking out said card base joined by said ink receiving layer from said cavity **(See paragraph [0003] where product is picked out of the die and the product has the ink receiving layer joined to the molded product.)**; and a step of peeling **(exfoliating)** said base material sheet from said transfer sheet in a manner that said ink receiving layer is left on said card base **(See paragraph [0003])**.

- a. The method taught in Yamaoka is inherently capably of being applied to the manufacture of a card. This is possible because Yamaoka teaches the

application of a decorative design onto flat surfaces. A card is a simple molded article and definitely within the teachings of Yamaoka.

9. In claim 3 Yamaoka teaches adding an anchor **(adhesive)** layer for enhancing airtightness of said ink receiving layer to said card base is pre-formed on said ink receiving layer . **(See paragraph [0003] and drawing 1 disclosing part number (5) which is an adhesive and added prior to molding.)**

10. In claim 4 Yamaoka teaches wherein after said card base is taken out from said cavity, printing is applied to said ink receiving layer. **(See paragraphs [0002-0005] disclosing that after the injection molding and the removal from the mold -- a printing operation is applied to the product.)**

11. In claim 5 Yamaoka teaches wherein said printing is executed by an ink-jet printer. **(See claim 1 and paragraph [0011] disclosing the use of an ink jet printer to print.)**

#### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka (Japanese Patent Publication JP 11028856) in view of Aoki et al. (Japanese Patent Publication JP 02001239779 A).

15. In claim 1 Yamaoka teaches a method for manufacturing a card comprising (See paragraphs [0001-0003], disclosing a decorating method used to impart a design print layer onto a resin molded article): a step of inserting a transfer sheet (See drawing 1 and paragraph [0003] disclosing a part number (1) which is a transfer sheet which includes both an ink receiving layer and a base material layer.) constituted by a base material sheet (See drawing 1 and paragraph [0003] disclosing part number (2) which is a substrate and acts as the base material sheet) on which an ink receiving layer (See drawing 1 and paragraph [0003] disclosing part number (4) which is a design print layer which acts as an ink receiving layer.) is formed into a cavity of a metal mold (See paragraph [0017] disclosing that the product is formed in a metallic mold by injection molding.) in a state where a surface of said ink receiving layer faces a mold gate of said metal mold (See drawing 5 showing the transfer sheet and ink receiving later facing the mold gate.); a step of molding a

card base by injecting an injection-molding resin into said cavity in a state where said transfer sheet is disposed in said cavity (See paragraphs [0001-0003] disclosing the injection molding of a resin material onto the transfer sheet in order to impart the ink receiving layer onto the resin molded product.), and at the same time joining said ink receiving layer to said card base (See paragraph [0003]); a step of taking out said card base joined by said ink receiving layer from said cavity (See paragraph [0003] where product is picked out of the die and the product has the ink receiving layer joined to the molded product.); and a step of peeling (exfoliating) said base material sheet from said transfer sheet in a manner that said ink receiving layer is left on said card base (See paragraph [0003]).

- b. Yamaoka does not explicitly teach the use of transfer sheet molding in the manufacture of a card.
- c. However, Aoki teaches the use of transfer sheet molding in the manufacture of a card. (See claim 1 and paragraphs [0001-0004] which discloses use of ink receiving layer to make an card.)
- d. Yamaoka and Aoki are analogous art because they are from the same field of endeavor which is transferring an ink receiving layer unto a molded product. At the time of invention, it would have been obvious to the applicant being one of ordinary skill in the art, having the teachings of Yamaoka and Aoki before him or her, to modify the teachings of Yamaoka with the teachings of Aoki for the benefit of making a card that can be easily printed on by an ink jet printer. The motivation for doing so would have been to allow many businesses to order



mass produced cards which then can be printed on on-site. Therefore, it would have been obvious to combine Yamaoka and Aoki to obtain the invention as claimed in claim 1.

16. In claim 2 Yamaoka does not explicitly teach wherein said ink receiving layer is formed of a heat-curable hydrophilic resin.

e. However, Aoki teaches wherein said ink receiving layer is formed of a heat-curable hydrophilic resin. **(See claim 1 disclosing the use of a heat curable hydrophilic resin.)**

f. Yamaoka and Aoki are analogous art because they are from the same field of endeavor which is transferring an ink receiving layer unto a molded product. At the time of invention, it would have been obvious to the applicant being one of ordinary skill in the art, having the teachings of Yamaoka and Aoki before him or her, to modify the teachings of Yamaoka with the teachings of Aoki for the benefit of using a hydrophilic resin as the ink receiving layer to allow printing on the card post production with a water based ink. The motivation for doing so would have been to allow the use of water based inks; as water based inks are common in ink-jet printers. Therefore, it would have been obvious to combine Yamaoka and Aoki to obtain the invention as claimed in claim 2.

17. In claim 3 Yamaoka teaches adding an anchor **(adhesive)** layer for enhancing airtightness of said ink receiving layer to said card base is pre-formed on said ink receiving layer . **(See paragraph [0003] and drawing 1 disclosing part number (5) which is an adhesive and added prior to molding.)**

18. In claim 4 Yamaoka teaches wherein after said card base is taken out from said cavity, printing is applied to said ink receiving layer. **(See paragraphs [0002-0005]**

**disclosing that after the injection molding and the removal from the mold -- a printing operation is applied to the product.)**

19. In claim 5 Yamaoka teaches wherein said printing is executed by an ink-jet printer. **(See claim 1 and paragraph [0011] disclosing the use of an ink jet printer to print.)**

20. In claim 6 Yamaoka does not explicitly teach adding a step of covering the surface of said ink receiving layer with a cover layer after printing is applied to said ink receiving layer.

g. However, Aoki teaches adding a step of covering the surface of said ink receiving layer with a cover layer after printing is applied to said ink receiving layer. **(See paragraph [0010] disclosing the use of a cover layer on top of the printed layer.)**

h. Yamaoka and Aoki are analogous art because they are from the same field of endeavor which is transferring an ink receiving layer unto a molded product. At the time of invention, it would have been obvious to the applicant being one of ordinary skill in the art, having the teachings of Yamaoka and Aoki before him or her, to modify the teachings of Yamaoka with the teachings of Aoki for the benefit of using a resin to cover the just printed ink layer in order to protect the decoration from abrasions. The motivation for doing so would have been to extend the useful life of the printed decoration. Therefore, it would have been

obvious to combine Yamaoka and Aoki to obtain the invention as claimed in claim 6.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMJAD ABRAHAM whose telephone number is (571)270-7058. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571) 272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AAA

***/Angela Ortiz/  
Supervisory Patent Examiner, Art Unit 4151***